

JH
FAE
3745

PTO/SB/21 (04-04)

Approved for use through 07/31/2006. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	09/328/931	
	Filing Date	06/09/1999	
	First Named Inventor	David C. Morris	
	Art Unit	3745	
	Examiner Name	Christopher V. Verdier	
Total Number of Pages in This Submission	10	Attorney Docket Number	MO1.003

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance communication to Technology Center (TC)
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input checked="" type="checkbox"/> Amendment / Reply	<input checked="" type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Terminal Disclaimer	<input type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Certified Copy of Priority Document(s)	Remarks	
<input type="checkbox"/> Response to Missing Parts/Incomplete Application	Enclosed is a petition to withdraw a holding of abandonment based on evidence that a reply was timely mailed/filed and a copy of the reply as it was originally filed.	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Timothy E. Siegel
Signature	<i>Timothy E. Siegel</i>
Date	03/29/2005

CERTIFICATE OF TRANSMISSION/MAILING		
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:		
Typed or printed name	Daniel M. Savage	
Signature		Date 03/29/2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: David C. Morris Art Unit: 3745
Serial No.: 09/328,931 Examiner: Christopher M. Verdier
Filing Date: 06/09/1999 Docket: M01.003
Title: HELICOPTER BLADE ASSEMBLY ADAPTED TO PERMIT
RAPID FORWARD FLIGHT

5

PETITION TO WITHDRAW HOLDING OF ABANDONMENT
UNDER 37 CFR 1.181(a) and MPEP 711.03(b)

10

Timothy E. Siegel
1868 Knapps Alley, Suite 206
West Linn, OR 97068-4644

March 29, 2005

15

Mail Stop Petition
Commissioner for Patents
P.O. Box 1450
20 Alexandria, VA 22313-1450

Dear Madam or Sir:

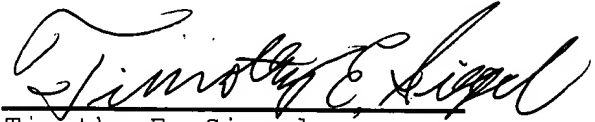
25 This petition is being filed to withdraw a
holding of abandonment based on evidence that a reply to
a decision of the Board of Patent Appeals and
Interferences (which was mailed on 12/30/2004) was timely
mailed or filed. Please find enclosed a copy of the
postcard receipt that identifies the above referenced
patent application by applicant, serial number, filing
30 date, and title, and also identifies the contents as an
amendment. The USPTO stamp shows that the response was
received on 03/03/2005. Please also find enclosed a copy
of the amendment as it was originally filed, which
includes a signed certificate of mailing indicating that

the reply was mailed by the due date of 02/28/2005. I respectfully request, based on the evidence enclosed, that the holding of abandonment be withdrawn.

5

Respectfully submitted,

10



Timothy E. Siegel
Attorney for Applicant
Reg. No.: 37,442
Tel. No.: (503) 650-7411
Fax No.: (503) 650-9886

15

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being
mailed 1st class to Mail Stop Petition, Commissioner for
5 Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on
March 29, 2005.

Signed: Daniel M. Savage Date: 03/29/2005
10 Daniel M. Savage



RECEIVED IN THE UNITED STATES PATENT AND TRADEMARK OFFICE


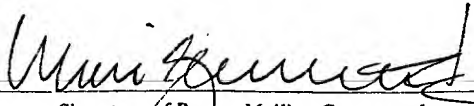
*****Amendment*****

Applicant: David C. Morris
Serial No.: 09/328,931
Filing Date: 06/09/1999
Title: Helicopter Blade Assembly Adapted to Permit Rapid Forward Flight

(1) Amendment Transmittal Letter (Small Entity) , 1 page
(1) Amendment, 4 pages
and this acknowledgement postcard

Docket: MO1.003
Mailed 1st Class: 02/28/2005
my



AMENDMENT TRANSMITTAL LETTER (Small Entity)				Docket No. MO1.003	
Applicant(s): MORRIS, DAVID C.					
Application No. 09/328,931	Filing Date 06/09/1999	Examiner VERDIER, C.	Customer No. 23893	Group Art Unit 3745	Confirmation No. 7477
Invention: HELICOPTER BLADE ASSEMBLY ADAPTED TO PERMIT RAPID FORWARD FLIGHT					
COMMISSIONER FOR PATENTS:					
Transmitted herewith is an amendment in the above-identified application.					
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27					
The fee has been calculated and is transmitted as shown below.					
CLAIMS AS AMENDED					
	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST # PREV. PAID FOR	NUMBER EXTRA CLAIMS PRESENT	RATE	ADDITIONAL FEE
TOTAL CLAIMS	3 -	20 =	0	x \$9.00	\$0.00
INDEP. CLAIMS	1 -	3 =	0	x \$39.00	\$0.00
Multiple Dependent Claims (check if applicable) <input type="checkbox"/>					\$0.00
TOTAL ADDITIONAL FEE FOR THIS AMENDMENT					\$0.00
<input checked="" type="checkbox"/> No additional fee is required for amendment. <input type="checkbox"/> Please charge Deposit Account No. _____ in the amount of _____ <input type="checkbox"/> A check in the amount of _____ to cover the filing fee is enclosed. <input checked="" type="checkbox"/> The Director is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 50-1152 <input checked="" type="checkbox"/> Any additional filing fees required under 37 C.F.R. 1.16. <input checked="" type="checkbox"/> Any patent application processing fees under 37 CFR 1.17. <input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.					
WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.					
 Signature			Dated: 02/28/2005		
cc: David C. Morris			I certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on 02/28/2005 (Date)  Signature of Person Mailing Correspondence Mari Yamamoto Typed or Printed Name of Person Mailing Correspondence		

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: David C. Morris **Group Art:** 3745
Serial No.: 09/328,931 **Examiner:** Christopher M. Verdier
Filing Date: 06/09/1999 **Docket:** MO1.003
Title: HELICOPTER BLADE ASSEMBLY ADAPTED TO PERMIT RAPID
FORWARD FLIGHT

5 Responsive to the decision of the Board of Patent
Appeals and Interferences dated December 30, 2004, please
enter the following changes:

IN THE CLAIMS

1. (currently amended) A helicopter blade assembly for permitting rapid forward flight in a helicopter having separate means for providing a forward
5 impetus, comprising:
substantially vertical mast; and
a set of rotatable blades which sweep out the shape of a virtual disk having the properties of a lifting body when they are rapidly rotated by the mast, so that as the
10 virtual disk is pushed translationally horizontally through the air it thereby generates lift.
2. (previously amended) The assembly of claim 1, further comprising means for controlling the camber of
15 the blades, thereby controlling the shape of the virtual disk.
3. (previously amended) The helicopter blade assembly of claim 2, wherein said blades have outward
20 tips and said means for controlling the camber of the blades selectively introduce a downward bending near said outward tips of said blades.
4. (previously amended) The helicopter blade
25 assembly of claim 1, wherein said virtual disk shape swept out has a center and a circular edge and is substantially flat at and near said center and slopes gently downwardly near said circular edge.

REMARKS

As suggested by the Board, applicant has introduced the word "horizontally" into Claim 1. Amended
5 claim 1 is clear, because the term "lifting body" is clearly defined in the relevant literature as a body that generates lift when passed through the air. This type of definition, based on functional properties, is clearly permitted in patent claiming. Any set of blades which
10 when rapidly rotated and passed translationally, horizontally through the air does not thereby generate lift, falls outside of the scope of claim 1.

There are clear tests which can be annunciated to determine if a particular set of blades could be used
15 to implement the method of claim 1. One test would be if a solid disk having the shape swept out would generate lift by being translated horizontally through the air. If it does not, then a set of blades sweeping out that shape would not fall within the scope of claim 1.

20 As for the Board's statement on page 6, beginning with, "[b]eing virtual...", it is applicant's position that this is exactly what happens. Lift is generated by the virtual disk being translated horizontally through real air. Applicant's dictionary
25 defines virtual as "being such practically or in effect, though not in actual fact... ." It is not as if applicant is stating that an imaginary disk can pass through real air and generate real lift. The virtual disk is physical and real. Over time, it is a disk that is defined by the
30 periodic presence of a blade at each spot in its extent. Experimentation has shown that it does generate lift.

Applicant believes that the claims are now in a condition for allowance, early notification of which is earnestly requested.

5

Respectfully submitted,

10



15

Timothy E. Siegel
Attorney for Applicant
Reg. No.: 37,442
1868 Knapps Alley, Suite 206
West Linn, OR 97068-4644
Tel.: 503.650.7411
Fax: 503.650.9886

20

Date: 02/28/2005